

Attachment G

CUWCC BMP Reports for 2003 & 2004

Reported as of 8/30/05

Water Supply & Reuse

Reporting Unit:

Long Beach Water Department

Year:

2003**Water Supply Source Information**

Supply Source Name	Quantity (AF) Supplied	Supply Type
Long Beach Recycled Water Facility	6620	Recycled
Central Basin Aquifer	23606	Groundwater
MWD SC - M&I	44436	Imported
MWD SC - Seawater Barrier	4769	Imported

Total AF: 79431

Reported as of 8/30/05

Accounts & Water Use

Reporting Unit Name:

Long Beach Water Department

Submitted to

CUWCC

Year:

2003**10/11/2004****A. Service Area Population Information:**

1. Total service area population 487100

B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)
1. Single-Family	60510	22048	0	0
2. Multi-Family	19956	23612	0	0
3. Commercial	5815	10578	0	0
4. Industrial	787	3135	0	0
5. Institutional	1143	3580	0	0
6. Dedicated Irrigation	988	2680	0	0
7. Recycled Water	79	6620	0	0
8. Other	1	4769	0	0
9. Unaccounted	NA	2408	NA	0
Total	89279	79430	0	0

Metered**Unmetered**

Reported as of 8/30/05

Reported as of 8/30/05

BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit: **Long Beach Water Department** BMP Form Status: **100% Complete** Year: **2003**

A. Implementation

- | | |
|--|------------|
| 1. Based on your signed MOU date, 09/28/1995, your Agency STRATEGY DUE DATE is: | 09/27/1997 |
| 2. Has your agency developed and implemented a targeting/marketing strategy for SINGLE-FAMILY residential water use surveys? | yes |
| a. If YES, when was it implemented? | 2/1/2002 |
| 3. Has your agency developed and implemented a targeting/marketing strategy for MULTI-FAMILY residential water use surveys? | yes |
| a. If YES, when was it implemented? | 1/1/2003 |

B. Water Survey Data

Survey Counts:	Single Family Accounts	Multi-Family Units
1. Number of surveys offered:	3303	2520
2. Number of surveys completed:	992	757

Indoor Survey:

- | | | |
|---|-----|-----|
| 3. Check for leaks, including toilets, faucets and meter checks | yes | yes |
| 4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary | no | no |
| 5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary; replace leaking toilet flapper, as necessary | yes | yes |

Outdoor Survey:

- | | | |
|--|-----|----------|
| 6. Check irrigation system and timers | no | no |
| 7. Review or develop customer irrigation schedule | no | no |
| 8. Measure landscaped area (Recommended but not required for surveys) | no | no |
| 9. Measure total irrigable area (Recommended but not required for surveys) | no | no |
| 10. Which measurement method is typically used (Recommended but not required for surveys) | | None |
| 11. Were customers provided with information packets that included evaluation results and water savings recommendations? | yes | yes |
| 12. Have the number of surveys offered and completed, survey results, and survey costs been tracked? | yes | yes |
| a. If yes, in what form are surveys tracked? | | database |

b. Describe how your agency tracks this information.

Customer request and results from water surveys are logged in an MS Access database.

C. Water Survey Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	107000	113300
2. Actual Expenditures	107000	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

In addition to performing water surveys based on High Bill Investigations, LBWD has begun a more intensive campaign at marketing water conservation to our residential customers. We distribute 5,000 low-flow shower heads at various community events throughout the year. We also distribute brochures that offer LBWD water conservation services to our residential customers in three languages, Spanish, Khmer, and English.

E. Comments

We have a very aggressive "high bill" investigation team that works closely with customer concerned about overuseage or that our automated billing system identifies as having unusually high useage. Through, this service offered to our customers, we have been able to maximize resources by marketing water surveys as part of the high bill service to our customers.

Reported as of 8/30/05

BMP 02: Residential Plumbing Retrofit

Reporting Unit:

BMP Form Status:

Year:

Long Beach Water Department**100% Complete****2003****A. Implementation**

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? no

a. If YES, list local jurisdictions in your service area and code or ordinance in each:

2. Has your agency satisfied the 75% saturation requirement for single-family housing units? no

3. Estimated percent of single-family households with low-flow showerheads: 60%

4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? no

5. Estimated percent of multi-family households with low-flow showerheads: 60%

6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? yes

a. If YES, when did your agency begin implementing this strategy? 5/1/1993

b. Describe your targeting/ marketing strategy.

In conjunction with MWD the department distributed ULFT's in cooperation with CBO's and local high schools. In addition, the Department has a volunteer Water Ambassador Program which consists of volunteers who distribute low-flow showerheads, garden hose nozzles and other conservation materials throughout the year.

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units
2. Number of low-flow showerheads distributed:	7000	1000
3. Number of toilet-displacement devices distributed:	0	0
4. Number of toilet flappers distributed:	0	0
5. Number of faucet aerators distributed:	0	0
6. Does your agency track the distribution and cost of low-flow devices?		yes

a. If YES, in what format are low-flow devices tracked? Manual Activity

b. If yes, describe your tracking and distribution system :

Our devices are tracked through the ordering process. LBWD distributed low flow showerheads and hose nozzles from LBWD facilities, during

water surveys, and at various community events through the Water Ambassadors.

C. Low-Flow Device Distribution Expenditures

	This Year	Next Year
1. Budgeted Expenditures	15000	15000
2. Actual Expenditures	15000	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

Reported as of 8/30/05

BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit:	BMP Form Status:	Year:
Long Beach Water Department	100% Complete	2003

A. Implementation

1. Has your agency completed a pre-screening system audit for this reporting year? yes
2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:
 - a. Determine metered sales (AF) 65634
 - b. Determine other system verifiable uses (AF) 1200
 - c. Determine total supply into the system (AF) 68042
 - d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required. 0.98
3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production? yes
4. Did your agency complete a full-scale audit during this report year? no
5. Does your agency maintain in-house records of audit results or the completed AWWA audit worksheets for the completed audit? yes
6. Does your agency operate a system leak detection program? yes
 - a. If yes, describe the leak detection program:

For the past 7 years, the Long Beach Water Department (LBWD) has maintained a very aggressive Capital Improvement Program (CIP) that has replaced up to 100,000 LF of cast iron mains each year. The mains being replaced are mains that have been identified through comprehensive studies using the latest technology, such as GIS, to be the most vulnerable pipes in the distribution system due to a combination of factors, corrosion, past pipe failure, and years of service. The LBWD has also seismically retrofitted our potable water storage tanks in the event of a natural disaster. The Department's CIP includes other programs such as a continuous replacement and new installation of water main in order to accomplish quicker shut downs with minimal impact to service or water loss. The Department's Water Operation program calls for ongoing replacement of all of the customer water meters as well as a testing program to assure accuracy, the LBWD currently replaces meters every fourteen years and on an as need basis. The Department also maintains a 24hour emergency crew on call in the event of any water leak report or other water related emergencies. Emergency field crews drive the length of all of the major water distribution mains to visually inspect for any leaks as well as inspect and exercise large valves. The Departments meter readers also serve as an integral part of the system leak detection program, by reporting to our construction personnel any leaking or malfunctioning meters. The LBWD Finance Bureau maintains accurate records of unaccounted for water usage. Such accurate reporting practice has averted serious water losses as well as assisted in the Department's ongoing effort at maintaining an extremely low unaccounted for water use, as low as 5%. Last year, a consultant was hired to validate our construction crews work in leak detection. To no surprise, from the 21 miles of pipe inspected no leaks were detected. However, we did learn about new technology

available for water system leak detection and will at times use the services of specialized leak detection consultant to verify any suspect or critical areas.

B. Survey Data

- | | |
|--|-----|
| 1. Total number of miles of distribution system line. | 900 |
| 2. Number of miles of distribution system line surveyed. | 300 |

C. System Audit / Leak Detection Program Expenditures

- | | This Year | Next Year |
|--------------------------|------------------|------------------|
| 1. Budgeted Expenditures | 95800 | 100000 |
| 2. Actual Expenditures | 100000 | |

D. "At Least As Effective As"

- | | |
|---|----|
| 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? | No |
|---|----|

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

In addition to our leak detection program, LBWD maintains an aggressive CIP that has replaced an average of 100,000 linear feet of cast iron mains each year. The mains being replaced are mains that have been identified through comprehensive studies using the latest technology, such as GIS, to identify the most vulnerable pipes based on factors such as corrosion, past pipe failure, and years of service. LBWD CIP also includes other programs such as continuous replacement and new installation of water mains in order to accomplish quicker shut downs with minimal impact to service or water loss. To further minimize water loss, LBWD's CIP calls for ongoing replacement of aged meters and a testing program to ensure accuracy.

Reported as of 8/30/05

BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit: **Long Beach Water Department** BMP Form Status: **100% Complete** Year: **2003**

A. Implementation

1. Does your agency require meters for all new connections and bill by volume-of-use? yes
2. Does your agency have a program for retrofitting existing unmetered connections and bill by volume-of-use? yes
 - a. If YES, when was the plan to retrofit and bill by volume-of-use existing unmetered connections completed? 1/1/1995
 - b. Describe the program:

All connections in the City of Long Beach are metered. Our system is quite old, going back to the 1800's, and we are not certain when the system-wide metering began.

3. Number of previously unmetered accounts fitted with meters during report year. 0

B. Feasibility Study

1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? no
 - a. If YES, when was the feasibility study conducted? (mm/dd/yy)
 - b. Describe the feasibility study:

2. Number of CII accounts with mixed-use meters. 0
3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period. 0

C. Meter Retrofit Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

Since all City of Long Beach connections are metered, we have maximized the potential for the BMP.

E. Comments

Reported as of 8/30/05

BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:

Long Beach Water**Department**

BMP Form Status:

100% Complete

Year:

2003

A. Water Use Budgets

- | | |
|--|-----|
| 1. Number of Dedicated Irrigation Meter Accounts: | 900 |
| 2. Number of Dedicated Irrigation Meter Accounts with Water Budgets: | 0 |
| 3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF): | 0 |
| 4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF): | 0 |
| 5. Does your agency provide water use notices to accounts with budgets each billing cycle? | no |

B. Landscape Surveys

- | | |
|--|-----|
| 1. Has your agency developed a marketing / targeting strategy for landscape surveys? | no |
| a. If YES, when did your agency begin implementing this strategy? | |
| b. Description of marketing / targeting strategy: | |
| 2. Number of Surveys Offered. | 1 |
| 3. Number of Surveys Completed. | 1 |
| 4. Indicate which of the following Landscape Elements are part of your survey: | |
| a. Irrigation System Check | yes |
| b. Distribution Uniformity Analysis | no |
| c. Review / Develop Irrigation Schedules | no |
| d. Measure Landscape Area | no |
| e. Measure Total Irrigable Area | no |
| f. Provide Customer Report / Information | no |
| 5. Do you track survey offers and results? | yes |
| 6. Does your agency provide follow-up surveys for previously completed surveys? | yes |
| a. If YES, describe below: | |

Follow-up surveys are offered at the request of the customer or if account is persistently identified as a high bill user.

C. Other BMP 5 Actions

- | | |
|---|-----|
| 1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets? | no |
| 2. Number of CII mixed-use accounts with landscape budgets. | 0 |
| 3. Do you offer landscape irrigation training? | yes |

4. Does your agency offer financial incentives to improve landscape water use efficiency? yes

Type of Financial Incentive:	Budget (Dollars/Year)	Number Awarded to Customers	Total Amount Awarded
a. Rebates	0	0	0
b. Loans	0	0	0
c. Grants	0	18000	18000

5. Do you provide landscape water use efficiency information to new customers and customers changing services? yes

a. If YES, describe below:

We provide all of our customers with water efficiency information on a regular basis via our monthly bill insert/newsletter.

6. Do you have irrigated landscaping at your facilities? yes

a. If yes, is it water-efficient? yes

b. If yes, does it have dedicated irrigation metering? yes

7. Do you provide customer notices at the start of the irrigation season? yes

8. Do you provide customer notices at the end of the irrigation season? yes

D. Landscape Conservation Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	15000	10000
2. Actual Expenditures	10000	

E. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

We have a very aggressive reclaimed water program, in which we have spent in excess of \$2 million this year, converting large landscape irrigation from potable to reclaimed water. We are reaching out to the largest landscape users in the City, such as parks, golf courses college campuses. We do not have many other large landscape areas that require large amounts of irrigation. In addition, we provide our customers with various literature on water conserving landscape as well as offer rebates for a variety of programs being administered by MWD of Southern California.

F. Comments

Reported as of 8/30/05

BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit: **Long Beach Water Department** BMP Form Status: **100% Complete** Year: **2003**

A. Implementation

1. Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers? no
- a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is.

2. Does your agency offer rebates for high-efficiency washers? yes
3. What is the level of the rebate? 125
4. Number of rebates awarded. 751

B. Rebate Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	65000	130000
2. Actual Expenditures	97630	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

The LBWD Residential High Efficiency Clothes Washer Rebate Program has become a very successful. We have increased the number of customer rebates from around 300 last year to nearly 800 this year, which equates to potable water saving of approximately 16 AF/Y. It is our intent to continue the program through 2005.

Reported as of 8/30/05

BMP 07: Public Information Programs

Reporting Unit:

BMP Form Status:

Year:

Long Beach Water Department**100% Complete****2003****A. Implementation**

1. Does your agency maintain an active public information program to promote and educate customers about water conservation? yes

a. If YES, describe the program and how it's organized.

The Water Ambassador Program - comprised of volunteers who are trained and versed in water issues attend all civic events, safety fairs, off-site City Council meetings, attend various events and functions during the year and have an especially intense month long water awareness program during the month of May. Water awareness month activities throughout the City of Long Beach also include news paper adds, bill inserts and other promotional activities such as community presentations and media events. We have continued to offer residential gardening classes know as "Protector del Agua" (PDA) a series of classes developed by MWD, to our customers. The PDA classes focus on a number of issues from planning, plant selection, irrigation to maintenance.

2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	yes	15
b. Public Service Announcement	yes	24
c. Bill Inserts / Newsletters / Brochures	yes	12000
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	yes	2
f. Special Events, Media Events	yes	4
g. Speaker's Bureau	yes	2
h. Program to coordinate with other government agencies, industry and public interest groups and media	yes	

B. Conservation Information Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	90000	93000
2. Actual Expenditures	90000	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Reported as of 8/30/05

BMP 08: School Education Programs

Reporting Unit:
**Long Beach Water
 Department**

BMP Form Status:
100% Complete

Year:
2003

A. Implementation

1. Has your agency implemented a school information program to promote water conservation? **yes**

2. Please provide information on your school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	yes	12	350	4
Grades 4th-6th	yes	183	5500	183
Grades 7th-8th	yes	2	50	2
High School	yes	1	25	1

3. Did your Agency's materials meet state education framework requirements? **yes**

4. When did your Agency begin implementing this program? **1/1/1993**

B. School Education Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	105000	105000
2. Actual Expenditures	16350	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? **No**

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

In 2002 LBWD implemented a new program reaching out to the entire 3rd grade population in the Long Beach Unified School District (8,000 students). This is in addition to the 4th grade program implemented in 2001 and youth outreach (coloring books). LBWD has hired a consultant to handle most of the K-12 education programs. In addition, the Water Ambassadors (a group of volunteers) assist with the various educational programs conducted at schools and at the Aquarium of the Pacific.

Reported as of 8/30/05

BMP 09: Conservation Programs for CII Accounts

Reporting Unit:

Long Beach Water

BMP Form Status:

100% Complete

Year:

2003**A. Implementation**

- | | |
|--|-----|
| 1. Has your agency identified and ranked COMMERCIAL customers according to use? | yes |
| 2. Has your agency identified and ranked INDUSTRIAL customers according to use? | yes |
| 3. Has your agency identified and ranked INSTITUTIONAL customers according to use? | yes |

Option A: CII Water Use Survey and Customer Incentives Program

- | | |
|---|-----|
| 4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option? | yes |
|---|-----|

CII Surveys	Commercial Accounts	Industrial Accounts	Institutional Accounts
a. Number of New Surveys Offered	1655	0	0
b. Number of New Surveys Completed	455	0	0
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0
CII Survey Components	Commercial Accounts	Industrial Accounts	Institutional Accounts
e. Site Visit	yes	yes	yes
f. Evaluation of all water-using apparatus and processes	no	no	no
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	no
Agency CII Customer Incentives	Budget (\$/Year)	No. Awarded to Customers	Total \$ Amount Awarded
h. Rebates	0	36	43120
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option?	yes
6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings?	yes
7. Estimated annual savings (AF/yr) from site-verified actions taken by agency since 1991.	3.49
8. Estimated annual savings (AF/yr) from non-site-verified actions taken by agency since 1991.	31.37

B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	30000	60000
2. Actual Expenditures	51400	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

In addition to other water conserving incentives, LBWD in conjunction with MWD of Southern California offered rebates to all CII customers within our service area, which include ULFTs, High Efficiency Commercial Washing Machines, Cooling Tower Conductivity Controllers, Pre-rinse Sprayers, X-Ray water recirculation system.

Reported as of 8/30/05

BMP 09a: CII ULFT Water Savings

Reporting Unit:

Long Beach Water Department

BMP Form Status:

100% Complete

Year:

2003

1. Did your agency implement a CII ULFT replacement program in the reporting year?

Yes

If No, please explain why on Line B. 10.

A. Targeting and Marketing

1. What basis does your agency use to target customers for participation in this program?

CII Sector or subsector

CII ULFT Study subsector targeting

Check all that apply.

- a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

We found CII sectors and sub sectors most effective because we were able to version our marketing efforts appropriately.

2. How does your agency advertise this program? Check all that apply.

Bill insert

Newsletter

Web page

Newspapers

Trade publications

Trade shows and events

Direct letter

Telemarketing

Other print media

- a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

For the purposes of this program, Trade Allies have proven to be the most effective overall marketing tool, as well as the most effective per dollar expended. Trade Allies include plumbers, distributors, retail home improvement stores and product manufacturers.

B. Implementation

1. Does your agency keep and maintain customer participant information? (Read the Help information for a complete list of all the information for this BMP.)

Yes

2. Would your agency be willing to share this information if the CUWCC did a study to evaluate the program on behalf of your agency?

Yes

3. What is the total number of customer accounts participating in the program during the last year ?

5

4.	CII Subsector				Number of Toilets Replaced			
	Standard Gravity Tank	Air Assisted	Valve Floor Mount	Valve Wall Mount				
a. Offices	0	0	0	0				0
b. Retail / Wholesale	0	0	0	0				0

c. Hotels	22	0	0	0
d. Health	0	0	0	0
e. Industrial	0	0	0	0
f. Schools: K to 12	0	0	0	0
g. Eating	0	0	0	0
h. Govern- ment	0	0	0	0
i. Churches	3	0	0	0
j. Other	0	0	0	0

5. Program design.

Rebate or voucher

6. Does your agency use outside services to implement this program? Yes

a. If yes, check all that apply.

Consultant

7. Participant tracking and follow-up.

Telephone

Site Visit

8. Based on your program experience, please rank on a scale of 1 to 5, with 1 being the least frequent cause and 5 being the most frequent cause, the following reasons why customers refused to participate in the program.

- | | |
|-------------------------------------|---|
| a. Disruption to business | 1 |
| b. Inadequate payback | 3 |
| c. Inadequate ULFT performance | 2 |
| d. Lack of funding | 5 |
| e. American's with Disabilities Act | 0 |
| f. Permitting | 0 |
| g. Other. Please describe in B. 9. | |

9. Please describe general program acceptance/resistance by customers, obstacles to implementation, and other issues affecting program implementation or effectiveness.

Customers are generally more willing to participate in the program if the cost of the retrofit is in balance with the amount of the rebate, and the projected water savings is significant. Resistance occurs if the out-of-pocket expense for the retrofit is too costly and the rebate amount is too low.

10. Please provide a general assessment of the program for this reporting year. Did your program achieve its objectives? Were your targeting and marketing approaches effective? Were program costs in line with expectations and budgeting?

Either Metropolitan or its Agencies to provide this response.

C. Conservation Program Expenditures for CII ULFT

1. CII ULFT Program: Annual Budget & Expenditure Data

	Budgeted	Actual Expenditure
a. Labor	0	0
b. Materials	0	0

c. Marketing & Advertising	0	0
d. Administration & Overhead	0	0
e. Outside Services	0	0
f. Total	0	0

2. CII ULFT Program: Annual Cost Sharing

a. Wholesale agency contribution	1920
b. State agency contribution	0
c. Federal agency contribution	0
d. Other contribution	0
e. Total	1920

D. Comments

Reported as of 8/30/05

BMP 11: Conservation Pricing

Reporting Unit:

Long Beach Water Department

BMP Form

Status:

100% Complete

Year:

2003**A. Implementation****Rate Structure Data Volumetric Rates for Water Service by Customer Class****1. Residential**

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$30865567
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$11540852

2. Commercial

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$7288507
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$2304093

3. Industrial

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$286684
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$90628

4. Institutional / Government

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$2695749
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$852199

5. Irrigation

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$1589206
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$502391

6. Other

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$608322
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$192307

B. Conservation Pricing Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	3000	3000
2. Actual Expenditures	3000	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

For many years, the LBWD has been using an increasing block rate for residential customers and uniform rate structure for CII customers and Large Landscapes. Sewer rates are uniform, but are based on water use, therefore, conserving potable water reduces the customer's sewer bill.

D. Comments

The numbers in this report are estimates and represent the CY 2003. Our agency relies on the City's utility billing system for revenue information; but the utility billing system is not capable of providing the information broken into the categories required by BMP 11. Therefore, we take the data available to us and break that information out into the BMP 11 categories are best we can. The "Total Revenue from Non-Volumetric Charges" includes monthly service charge and taxes.

Reported as of 8/30/05

BMP 12: Conservation Coordinator

Reporting Unit:	BMP Form Status:	Year:
Long Beach Water Department	100% Complete	2003

A. Implementation

1. Does your Agency have a conservation coordinator? yes
2. Is this a full-time position? yes
3. If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program ? no
4. Partner agency's name: N/A
5. If your agency supplies the conservation coordinator:
 - a. What percent is this conservation coordinator's position? 100%
 - b. Coordinator's Name Juan E. Ovalle
 - c. Coordinator's Title Administrative Analyst III
 - d. Coordinator's Experience and Number of Years 2.55
 - e. Date Coordinator's position was created (mm/dd/yyyy) 7/1/1992
6. Number of conservation staff, including Conservation Coordinator. 1

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	105000	105000
2. Actual Expenditures	105000	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

LBWD has partnered with MWD for many years in order to bring greater rewards to our customers for conserving, as well as promoting water conservation and the BMP's. LBWD currently has one fulltime employee (FTE) performing the tasks of Water Conservation Coordinator and additional staff that share their time with various water conservation education outreach and promotional activities which equals to a total of 1.33 FTE's.

Reported as of 8/30/05

BMP 13: Water Waste Prohibition

Reporting Unit:	BMP Form Status:	Year:
Long Beach Water Department	100% Complete	2003

A. Requirements for Documenting BMP Implementation

1. Is a water waste prohibition ordinance in effect in your service area? no

a. If YES, describe the ordinance:

The City of Long Beach Board of Water Commissioners Resolution No. WD-1071 -Emergency Water Conservation Plan adopted in 1991 includes Water Waste Prohibition. However, it is has been reserved for water emergencies resulting from State and local water supply and storage shortages.

2. Is a copy of the most current ordinance(s) on file with CUWCC? yes

a. List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

City of Long Beach	Resolution No. WD-1071 is currently inactive.
--------------------	---

B. Implementation

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

a. Gutter flooding	yes
b. Single-pass cooling systems for new connections	no
c. Non-recirculating systems in all new conveyor or car wash systems	no
d. Non-recirculating systems in all new commercial laundry systems	no
e. Non-recirculating systems in all new decorative fountains	yes
f. Other, please name Customer system leaks; hosing off hard surfaces; water automatically served in restaurants.	yes

2. Describe measures that prohibit water uses listed above:

Long Beach Board of Water Commissioners Resolution No. WD-1071, - Emergency Water Conservation Plan. Resolution No. WD-1071 is currently inactive.

Water Softeners:

3. Indicate which of the following measures your agency has supported in developing state law:

a. Allow the sale of more efficient, demand-initiated regenerating DIR models.	no
b. Develop minimum appliance efficiency standards that:	
i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used.	no
ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced.	no

c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply. no

4. Does your agency include water softener checks in home water audit programs? no

5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models? no

C. Water Waste Prohibition Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	5000	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

Rather than having a Water Waste Prohibition ordinance in effect in the LBWD service area, we have developed very extensive educational and outreach programs. LBWD's primary objective is to reach our customers on a very positive tone and work at changing behavior and developing greater awareness of water issues facing the City of Long Beach and in particular water conservation. A program begun in 2002, and developed by MWD is a set of residential gardening classes know as "Protector del Agua" a series of classes that deal with a number of issues from planning, plant selection, irrigation to maintenance have been offered to our residential customers. The City of Long Beach Board of Water Commissioners Resolution No. WD-1071 -Emergency Water Conservation Plan adopted in 1991 includes water waste prohibition measures. However, the resolution is reserved for water shortage emergencies resulting from extremely low water supply and storage as indicated by the State Water Resources Control Board and the Metropolitan Water District of Southern California.

E. Comments

Reported as of 8/30/05

BMP 14: Residential ULFT Replacement Programs

Reporting Unit:

BMP Form Status:

Year:

Long Beach Water Department**100% Complete****2003****A. Implementation**

	Single-Family Accounts	Multi- Family Units
1. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	yes	yes

Number of Toilets Replaced by Agency Program During Report Year

Replacement Method	SF Accounts	MF Units
2. Rebate	198	174
3. Direct Install	0	0
4. CBO Distribution	0	0
5. Other	3507	1036
Total	3705	1210

6. Describe your agency's ULFT program for single-family residences.

The LBWD Single-family Residential ULFT Program encourages the replacement of water-guzzling toilets with no greater than 1.6 gallon ultra low-flush toilets. Single-family customers can either purchase their toilet from a vendor and apply for a rebate, or they can pick up free toilets at a designated distribution site. The distributions are handled using local area high schools and or CBO.

7. Describe your agency's ULFT program for multi-family residences.

The LBWD Multi-family Residential ULFT Program encourages the replacement of water-guzzling toilets with no greater than 1.6 gallon ultra low-flush toilets. Multi-family customers can either purchase their toilet from a vendor and apply for a rebate, or they can pick up free toilets at a designated distribution site. The distributions are handled using local area high schools and or CBO. Delivery service is provided to multi-family customers requesting over 10 toilets from the Water Departments ULFT Program.

8. Is a toilet retrofit on resale ordinance in effect for your service area? no

9. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:

City of Long Beach

Resale ordinance not in effect

B. Residential ULFT Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	600000	650000
2. Actual Expenditures	657390	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

MWD of Southern California is a cosponsor of the LBWD ULFT Program and provides funding to cover half the cost of each toilet exchanged or rebated.

Reported as of 8/30/05

Water Supply & Reuse

Reporting Unit:

Long Beach Water Department

Year:

2004**Water Supply Source Information**

Supply Source Name	Quantity (AF) Supplied	Supply Type
Long Beach Recycled Water Facility	6178	Recycled
Central Basin Aquifer	25639	Groundwater
MWD SC-M&I	45300	Imported
MWD SC - Seawater Barrier	5970	Imported

Total AF: 83087

Reported as of 8/30/05

Accounts & Water Use

Reporting Unit Name:
Long Beach Water Department

Submitted to
CUWCC
12/03/2004

Year:
2004

A. Service Area Population Information:

1. Total service area population 490000

B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)
1. Single-Family	60253	22630	0	0
2. Multi-Family	19864	23053	0	0
3. Commercial	6427	10768	0	0
4. Industrial	724	3176	0	0
5. Institutional	1052	3596	0	0
6. Dedicated Irrigation	981	3062	0	0
7. Recycled Water	79	6178	0	0
8. Other	1	5970	0	0
9. Unaccounted	NA	4653	NA	0
Total	89381	83086	0	0

Metered**Unmetered**

Reported as of 8/30/05

Reported as of 8/30/05

BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit: **Long Beach Water Department** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

- | | |
|--|------------|
| 1. Based on your signed MOU date, 09/28/1995, your Agency STRATEGY DUE DATE is: | 09/27/1997 |
| 2. Has your agency developed and implemented a targeting/marketing strategy for SINGLE-FAMILY residential water use surveys? | yes |
| a. If YES, when was it implemented? | 2/01/2002 |
| 3. Has your agency developed and implemented a targeting/marketing strategy for MULTI-FAMILY residential water use surveys? | yes |
| a. If YES, when was it implemented? | 01/01/2003 |

B. Water Survey Data

Survey Counts:	Single Family Accounts	Multi-Family Units
1. Number of surveys offered:	501	2604
2. Number of surveys completed:	73	212

Indoor Survey:

- | | | |
|---|-----|-----|
| 3. Check for leaks, including toilets, faucets and meter checks | yes | yes |
| 4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary | no | no |
| 5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary; replace leaking toilet flapper, as necessary | yes | yes |

Outdoor Survey:

- | | | |
|--|----------------|-----|
| 6. Check irrigation system and timers | no | yes |
| 7. Review or develop customer irrigation schedule | no | yes |
| 8. Measure landscaped area (Recommended but not required for surveys) | no | yes |
| 9. Measure total irrigable area (Recommended but not required for surveys) | no | yes |
| 10. Which measurement method is typically used (Recommended but not required for surveys) | Odometer Wheel | |
| 11. Were customers provided with information packets that included evaluation results and water savings recommendations? | yes | yes |
| 12. Have the number of surveys offered and completed, survey results, and survey costs been tracked? | yes | yes |
| a. If yes, in what form are surveys tracked? | database | |

b. Describe how your agency tracks this information.

Customer request and results from water surveys are logged in an MS Access database.

C. Water Survey Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	50000	100000
2. Actual Expenditures	50000	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

In addition to performing water surveys based on High Bill Investigations, LBWD has begun a more intensive campaign at marketing water conservation to our residential customers. We distribute 8,000 low-flow shower heads at various community events throughout the year. We also distribute brochures that offer LBWD water conservation services to our residential customers in three languages, Spanish, Khmer, and English. In addition, we have expanded our efforts to include landscaping. Due to a limited staff, during this reporting period LBWD hired a consultant to conduct irrigation surveys of commercial/institutional customers. In the coming years we expect to expand to residential customers as well.

E. Comments

We have a very aggressive "high bill" investigation team that works closely with customer concerned about overuseage or that our automated billing system identifies as having unusually high useage. Through, this service offered to our customers, we have been able to maximize resources by marketing water surveys as part of the high bill service to our customers.

Reported as of 8/30/05

BMP 02: Residential Plumbing Retrofit

Reporting Unit:

BMP Form Status:

Year:

Long Beach Water Department**100% Complete****2004****A. Implementation**

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? no

a. If YES, list local jurisdictions in your service area and code or ordinance in each:

2. Has your agency satisfied the 75% saturation requirement for single-family housing units? no

3. Estimated percent of single-family households with low-flow showerheads: 63%

4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? no

5. Estimated percent of multi-family households with low-flow showerheads: 63%

6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? yes

a. If YES, when did your agency begin implementing this strategy? 05/01/1993

b. Describe your targeting/ marketing strategy.

The Department has a volunteer Water Ambassador Program which consists of volunteers who distribute low-flow showerheads, garden hose nozzles and other conservation materials throughout the year.

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units
2. Number of low-flow showerheads distributed:	7000	1000
3. Number of toilet-displacement devices distributed:	0	0
4. Number of toilet flappers distributed:	0	0
5. Number of faucet aerators distributed:	0	0
6. Does your agency track the distribution and cost of low-flow devices?		yes
a. If YES, in what format are low-flow devices tracked?		Manual Activity
b. If yes, describe your tracking and distribution system :		

Our devices are tracked through the ordering process. LBWD distributed low flow showerheads and hose nozzles from LBWD facilities, during water surveys, and at various community events through the Water Ambassadors.

C. Low-Flow Device Distribution Expenditures

	This Year	Next Year
1. Budgeted Expenditures	15000	15000
2. Actual Expenditures	15000	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

Reported as of 8/30/05

BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit:

BMP Form Status:

Year:

Long Beach Water Department**100% Complete****2004****A. Implementation**

1. Has your agency completed a pre-screening system audit for this reporting year? yes
2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:
 - a. Determine metered sales (AF) 66285
 - b. Determine other system verifiable uses (AF) 5970
 - c. Determine total supply into the system (AF) 76908
 - d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required. 0.94
3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production? yes
4. Did your agency complete a full-scale audit during this report year? no
5. Does your agency maintain in-house records of audit results or the completed AWWA audit worksheets for the completed audit? yes
6. Does your agency operate a system leak detection program? yes
 - a. If yes, describe the leak detection program:

The Long Beach Water Department (LBWD) maintains a very aggressive Capital Improvement Program (CIP) replaces up to 60,000 LF of cast iron mains each year. The mains being replaced are mains that have been identified through comprehensive studies using the latest technology, such as GIS, to be the most vulnerable pipes in the distribution system due to a combination of factors, corrosion, past pipe failure, and years of service. The Department's CIP includes other programs such as a continuous replacement and new installation of water main in order to accomplish quicker shut downs with minimal impact to service or water loss. The Department's Water Operation program calls for ongoing replacement of all of the customer water meters as well as a testing program to assure accuracy, the LBWD currently replaces meters every fourteen years and on an as need basis. The Department also maintains a 24-hour emergency crew on call in the event of any water leak report or other water-related emergencies. Emergency field crews drive the length of all of the major water distribution mains to visually inspect for any leaks as well as inspect and exercise large valves. The Departments meter readers also serve as an integral part of the system leak detection program, by reporting to our construction personnel any leaking or malfunctioning meters. The LBWD Finance Bureau maintains accurate records of unaccounted for water usage. Such accurate reporting practice has averted serious water losses as well as assisted in the Department's ongoing effort at maintaining an extremely low unaccounted for water use, as low as 5%. LBWD learned about new technology available for water system leak detection and will at times use the services of specialized leak detection consultant to verify any suspect or critical areas.

B. Survey Data

- | | |
|--|-----|
| 1. Total number of miles of distribution system line. | 915 |
| 2. Number of miles of distribution system line surveyed. | 225 |

C. System Audit / Leak Detection Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	100000	100000
2. Actual Expenditures	96386	

D. "At Least As Effective As"

- | | |
|---|----|
| 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? | No |
|---|----|

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

In addition to our leak detection program, LBWD maintains an aggressive CIP that has replaced an average of 100,000 linear feet of cast iron mains each year. The mains being replaced are mains that have been identified through comprehensive studies using the latest technology, such as GIS, to identify the most vulnerable pipes based on factors such as corrosion, past pipe failure, and years of service. LBWD CIP also includes other programs such as continuous replacement and new installation of water mains in order to accomplish quicker shut downs with minimal impact to service or water loss. To further minimize water loss, LBWD's CIP calls for ongoing replacement of aged meters and a testing program to ensure accuracy.

Reported as of 8/30/05

BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:

**Long Beach Water
Department**

BMP Form Status:

100% Complete

Year:

2004

A. Implementation

1. Does your agency require meters for all new connections and bill by volume-of-use? yes

2. Does your agency have a program for retrofitting existing unmetered connections and bill by volume-of-use? yes

a. If YES, when was the plan to retrofit and bill by volume-of-use existing unmetered connections completed? 01/01/1995

b. Describe the program:

All connections in the City of Long Beach are metered. Our system is quite old, going back to the 1800's, and we are not certain when the system-wide metering began.

3. Number of previously unmetered accounts fitted with meters during report year. 0

B. Feasibility Study

1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? yes

a. If YES, when was the feasibility study conducted? 06/07/2004
(mm/dd/yy)

b. Describe the feasibility study:

The feasibility study identified the 1,000 CII accounts that are most likely to use the most amount of water irrigating landscape. A present-worth analysis took into consideration the likely capital cost and operating cost of a dedicated landscape meter program as well as the benefits of the program's conserved water. The study found the program would not be feasible in large part because of the cost of significant changes necessary in the billing software and the capital cost of installing a new service line and meter.

2. Number of CII accounts with mixed-use meters. 0

3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period. 0

C. Meter Retrofit Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

Since all City of Long Beach connections are metered, we have maximized the potential for the BMP.

E. Comments

Our utility billing system does not have such a classification as "mixed use" customer which makes it impossible to quantify how many accounts actually qualify as mixed use.

Reported as of 8/30/05

BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:

Long Beach Water**Department**

BMP Form Status:

100% Complete

Year:

2004

A. Water Use Budgets

- | | |
|--|-----|
| 1. Number of Dedicated Irrigation Meter Accounts: | 915 |
| 2. Number of Dedicated Irrigation Meter Accounts with Water Budgets: | 170 |
| 3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF): | 225 |
| 4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF): | 208 |
| 5. Does your agency provide water use notices to accounts with budgets each billing cycle? | yes |

B. Landscape Surveys

- | | |
|--|------------|
| 1. Has your agency developed a marketing / targeting strategy for landscape surveys? | yes |
| a. If YES, when did your agency begin implementing this strategy? | 03/31/2004 |
| b. Description of marketing / targeting strategy: | |

LBWD has developed an aggressive landscape survey/ water budget program. The targeting strategy is to identify dedicated landscape meter accounts and, working with the account owners, develop water budgets. The budgets will be based on daily CIMIS reads. Initially, the budgets will be reported at the time of the regular billing cycles; but we hope to eventually make the budgets available on a weekly basis over the internet. The landscape surveys will have two components: one is a budget based on current landscape and irrigation system conditions (with minor adjustments); the second budget will be a 'stretch goal' for the irrigator to hopefully reach within 5 years.

- | | |
|---|-----|
| 2. Number of Surveys Offered. | 170 |
| 3. Number of Surveys Completed. | 170 |
| 4. Indicate which of the following Landscape Elements are part of your survey: | |
| a. Irrigation System Check | yes |
| b. Distribution Uniformity Analysis | no |
| c. Review / Develop Irrigation Schedules | no |
| d. Measure Landscape Area | yes |
| e. Measure Total Irrigable Area | yes |
| f. Provide Customer Report / Information | yes |
| 5. Do you track survey offers and results? | yes |
| 6. Does your agency provide follow-up surveys for previously completed surveys? | |

a. If YES, describe below:

Sites where problems are noted are prioritized within our database

based on the amount of water loss from High (broken/missing sprinkler heads) to low (foliage blockage). These accounts are checked on a monthly basis until all noted problems are addressed to LBWD's satisfaction.

C. Other BMP 5 Actions

1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. no
Does your agency provide mixed-use accounts with landscape budgets?
2. Number of CII mixed-use accounts with landscape budgets. 0
3. Do you offer landscape irrigation training? yes
4. Does your agency offer financial incentives to improve landscape water use efficiency? yes

Type of Financial Incentive:	Budget (Dollars/Year)	Number Awarded to Customers	Total Amount Awarded
a. Rebates	0	1	300
b. Loans	0	0	0
c. Grants	0	0	0
5. Do you provide landscape water use efficiency information to new customers and customers changing services?			yes

a. If YES, describe below:

We provide all of our customers with water efficiency information on a regular basis via our monthly bill insert/newsletter.

6. Do you have irrigated landscaping at your facilities? yes
 - a. If yes, is it water-efficient? yes
 - b. If yes, does it have dedicated irrigation metering? yes
7. Do you provide customer notices at the start of the irrigation season? yes
8. Do you provide customer notices at the end of the irrigation season? yes

D. Landscape Conservation Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	15000	20000
2. Actual Expenditures	17000	

E. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

We have a very aggressive reclaimed water program, in which we have spent in excess of \$2 million this year, converting large landscape irrigation from potable to reclaimed water. We are reaching out to the largest landscape users in the City, such as parks, golf courses college campuses. We do not have many other large landscape areas that

require large amounts of irrigation. In addition, we provide our customers with various literature on water conserving landscape as well as offer rebates for a variety of programs being administered by MWD of Southern California.

F. Comments

Reported as of 8/30/05

BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit: **Long Beach Water Department** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

1. Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers? no
- a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is.

2. Does your agency offer rebates for high-efficiency washers? yes
3. What is the level of the rebate? 125
4. Number of rebates awarded. 875

B. Rebate Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	130000	280000
2. Actual Expenditures	125160	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

The LBWD Residential High Efficiency Clothes Washer Rebate Program has become a very successful. We have increased the number of customer rebates from around 500 last year to over 800 this year, which equates to potable water saving of approximately 16 AF/Y. It is our intent to continue the program through 2005.

Reported as of 8/30/05

BMP 07: Public Information Programs

Reporting Unit:

BMP Form Status:

Year:

Long Beach Water Department**100% Complete****2004****A. Implementation**

1. Does your agency maintain an active public information program to promote and educate customers about water conservation? yes

a. If YES, describe the program and how it's organized.

LBWD maintains an aggressive public education program. Our Water Ambassador Program offers the most visibility. Volunteers are trained and educated by our staff and in turn they attend various community meetings, City Council meetings, and various other public events promoting water conservation. We also aggressively promote Water Awareness Month during the month of May. Activities during the month include: community presentations; media events; advertisements; bill inserts; and other promotional activities. LBWD also offers residential & professional landscaping courses throughout the year. We have a dedicated page on our website strictly for water conservation. This past year we also created a "self audit" home inspection that has received good reviews from our residential customers. We have also partnered with the Aquarium of the Pacific to increase our educational outreach.

2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	yes	4
b. Public Service Announcement	yes	1
c. Bill Inserts / Newsletters / Brochures	yes	15000
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	yes	1
f. Special Events, Media Events	yes	8
g. Speaker's Bureau	yes	2
h. Program to coordinate with other government agencies, industry and public interest groups and media	yes	

B. Conservation Information Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	260000	260000
2. Actual Expenditures	251274	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

This year we created a Residential Self Audit pamphlet which was sent to over 6,000 residents. The pamphlet has been well received and we anticipate expanding the distribution to multi-family residents in the coming year.

Reported as of 8/30/05

BMP 08: School Education Programs

Reporting Unit:

**Long Beach Water
Department**

BMP Form Status:

100% Complete

Year:

2004**A. Implementation**

1. Has your agency implemented a school information program to promote water conservation? yes

2. Please provide information on your school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	yes	36	320	3
Grades 4th-6th	yes	38	830	0
Grades 7th-8th	yes	7	120	0
High School	yes	4	35	2

3. Did your Agency's materials meet state education framework requirements? yes

4. When did your Agency begin implementing this program? 09/15/2002

B. School Education Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	23000	23000
2. Actual Expenditures	17585	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

In 2002 LBWD implemented a new program reaching out to the entire 3rd grade population in the Long Beach Unified School District (8,000 students). This is in addition to the 4th grade program implemented in 2001 and youth outreach (coloring books). LBWD has hired a consultant to handle most of the K-12 education programs. In addition, the Water Ambassadors (a group of volunteers) assist with the various educational programs conducted at schools and at the Aquarium of the Pacific.

Reported as of 8/30/05

BMP 09: Conservation Programs for CII Accounts

Reporting Unit:

**Long Beach Water
Department**

BMP Form Status:

100% Complete

Year:

2004**A. Implementation**

- | | |
|--|-----|
| 1. Has your agency identified and ranked COMMERCIAL customers according to use? | yes |
| 2. Has your agency identified and ranked INDUSTRIAL customers according to use? | yes |
| 3. Has your agency identified and ranked INSTITUTIONAL customers according to use? | yes |

Option A: CII Water Use Survey and Customer Incentives Program

- | | |
|---|-----|
| 4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option? | yes |
|---|-----|

CII Surveys	Commercial Accounts	Industrial Accounts	Institutional Accounts
a. Number of New Surveys Offered	5	0	0
b. Number of New Surveys Completed	5	0	0
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	1	0	0
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0
CII Survey Components	Commercial Accounts	Industrial Accounts	Institutional Accounts
e. Site Visit	yes	yes	yes
f. Evaluation of all water-using apparatus and processes	no	no	no
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	no
Agency CII Customer Incentives	Budget (\$/Year)	No. Awarded to Customers	Total \$ Amount Awarded
h. Rebates	0	53	82380
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option?	yes
6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings?	yes
7. Estimated annual savings (AF/yr) from site-verified actions taken by agency since 1991.	6.08
8. Estimated annual savings (AF/yr) from non-site-verified actions taken by agency since 1991.	54.75

B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	0	100000
2. Actual Expenditures	95470	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	No
---	----

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

In addition to other water conserving incentives, LBWD in conjunction with MWD of Southern California offered rebates to all CII customers within our service area, which include ULFTs, High Efficiency Commercial Washing Machines, Cooling Tower Conductivity Controllers, Pre-rinse Sprayers, X-Ray water recirculation system.

Reported as of 8/30/05

BMP 09a: CII ULFT Water Savings

Reporting Unit:

Long Beach Water Department

BMP Form Status:

100% Complete

Year:

2004

1. Did your agency implement a CII ULFT replacement program in the reporting year?

Yes

If No, please explain why on Line B. 10.

A. Targeting and Marketing

1. What basis does your agency use to target customers for participation in this program?

Service area zones

Check all that apply.

- a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

Long Beach Water Department (LBWD) targets all of its service area, by promoting water conservation and the opportunity to participate in CII ULFT rebates. LBWD works with the Metropolitan Water District of So. Cal., and Honeywell DMC (who manages the program).

2. How does your agency advertise this program? Check all that apply.

Bill insert

Newsletter

Web page

Newspapers

Trade publications

Trade shows and events

- a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

The most effective method for promoting water conservation programs including the CII ULFT rebates has been through a monthly bill insert/newsletter produced by the City of Long Beach and paid for in large part by LBWD.

B. Implementation

1. Does your agency keep and maintain customer participant information? (Read the Help information for a complete list of all the information for this BMP.)

Yes

2. Would your agency be willing to share this information if the CUWCC did a study to evaluate the program on behalf of your agency?

Yes

3. What is the total number of customer accounts participating in the program during the last year ?

53

CII Subsector**Number of Toilets Replaced**

4.	Standard Gravity Tank	Air Assisted	Valve Floor Mount	Valve Wall Mount
a. Offices	0	0	0	0
b. Retail / Wholesale	0	0	0	0

c. Hotels	256	0	0	0
d. Health	0	0	0	0
e. Industrial	1	0	0	0
f. Schools: K to 12	0	0	0	0
g. Eating	0	0	0	0
h. Govern- ment	0	0	0	0
i. Churches	1	0	0	0
j. Other	1	0	0	0

5. Program design.

Rebate or voucher

6. Does your agency use outside services to implement this program? Yes

a. If yes, check all that apply.

Consultant

7. Participant tracking and follow-up.

No follow-up

8. Based on your program experience, please rank on a scale of 1 to 5, with 1 being the least frequent cause and 5 being the most frequent cause, the following reasons why customers refused to participate in the program.

- | | |
|-------------------------------------|---|
| a. Disruption to business | 5 |
| b. Inadequate payback | 4 |
| c. Inadequate ULFT performance | 1 |
| d. Lack of funding | 4 |
| e. American's with Disabilities Act | 2 |
| f. Permitting | 1 |
| g. Other. Please describe in B. 9. | 0 |

9. Please describe general program acceptance/resistance by customers, obstacles to implementation, and other issues affecting program implementation or effectiveness.

Acceptance of the program has increased. In comparison to last year, we have increased participation by almost 50%. The increase was largely attributed to targeting trade shows where the consultant was in direct contact with our customers.

10. Please provide a general assessment of the program for this reporting year. Did your program achieve its objectives? Were your targeting and marketing approaches effective? Were program costs in line with expectations and budgeting?

With an increase of almost 50% in customer participation, we believe the program was successful. With the consultant concentrating on trade shows for future campaigns, we anticipate participation to grow.

C. Conservation Program Expenditures for CII ULFT

1. CII ULFT Program: Annual Budget & Expenditure Data

Budgeted	Actual Expenditure
-----------------	-------------------------------

a. Labor	0	0
b. Materials	0	0
c. Marketing & Advertising	0	0
d. Administration & Overhead	0	0
e. Outside Services	0	0
f. Total	0	0

2. CII ULFT Program: Annual Cost Sharing

a. Wholesale agency contribution	82380
b. State agency contribution	0
c. Federal agency contribution	0
d. Other contribution	0
e. Total	82380

D. Comments

LBWD participates in Metropolitan Water District of Southern California's CII program, which is administered by Honeywell DMC. In coordination with MWD, we provide supplemental advertising.

Reported as of 8/30/05

BMP 11: Conservation Pricing

Reporting Unit:
Long Beach Water Department

BMP Form
 Status:
100% Complete

Year:
2004

A. Implementation

Rate Structure Data Volumetric Rates for Water Service by Customer Class

1. Residential

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$33085451
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$11639372

2. Commercial

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$7868042
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$2356444

3. Industrial

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$309479
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$92688

4. Institutional / Government

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$2910098
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$871562

5. Irrigation

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$1715569
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$513805

6. Other

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from Volumetric Rates	\$656691
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources	\$196676

B. Conservation Pricing Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	3000	3000
2. Actual Expenditures	3000	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

For many years, the LBWD has been using an increasing block rate for residential customers and uniform rate structure for CII customers and Large Landscapes. Sewer rates are uniform, but are based on water use, therefore, conserving potable water reduces the customer's sewer bill.

D. Comments

The numbers in this report are estimates and represent the CY 2004. Our agency relies on the City's utility billing system for revenue information; but the utility billing system is not capable of providing the information broken into the categories required by BMP 11. Therefore, we take the data available to us and break that information out into the BMP 11 categories are best we can. The "Total Revenue from Non-Volumetric Charges" includes monthly service charge and taxes. Revenue for the months of Nov and Dec '04 are estimates based on the same months in '03.

Reported as of 8/30/05

BMP 12: Conservation Coordinator

Reporting Unit:

Long Beach Water Department

BMP Form Status:

100% Complete

Year:

2004**A. Implementation**

1. Does your Agency have a conservation coordinator? yes
2. Is this a full-time position? yes
3. If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program ? no
4. Partner agency's name: n/a
5. If your agency supplies the conservation coordinator:
 - a. What percent is this conservation coordinator's position? 100%
 - b. Coordinator's Name Matthew P. Lyons
 - c. Coordinator's Title Manager, Planning
 - d. Coordinator's Experience and Number of Years 7.5
 - e. Date Coordinator's position was created (mm/dd/yyyy) 10/01/2000
6. Number of conservation staff, including Conservation Coordinator. 3

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	215000	210930
2. Actual Expenditures	215000	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

LBWD has been able to increase its conservations efforts with the increase in staff.

Reported as of 8/30/05

BMP 13: Water Waste Prohibition

Reporting Unit:	BMP Form Status:	Year:
Long Beach Water Department	100% Complete	2004

A. Requirements for Documenting BMP Implementation

1. Is a water waste prohibition ordinance in effect in your service area? no

a. If YES, describe the ordinance:

The City of Long Beach Board of Water Commissioners Resolution No. WD-1071 -Emergency Water Conservation Plan adopted in 1991 includes Water Waste Prohibition. However, it is has been reserved for water emergencies resulting from State and local water supply and storage shortages.

2. Is a copy of the most current ordinance(s) on file with CUWCC? yes

a. List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

City of Long Beach	Resolution No. WD-1071 is currently inactive.
--------------------	---

B. Implementation

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

a. Gutter flooding	yes
b. Single-pass cooling systems for new connections	no
c. Non-recirculating systems in all new conveyor or car wash systems	no
d. Non-recirculating systems in all new commercial laundry systems	no
e. Non-recirculating systems in all new decorative fountains	yes
f. Other, please name Customer system leaks; hosing off hard surfaces; water automatically served in restaurants.	yes

2. Describe measures that prohibit water uses listed above:

Long Beach Board of Water Commissioners Resolution No. WD-1071, - Emergency Water Conservation Plan. Resolution No. WD-1071 is currently inactive.

Water Softeners:

3. Indicate which of the following measures your agency has supported in developing state law:

a. Allow the sale of more efficient, demand-initiated regenerating DIR models.	no
b. Develop minimum appliance efficiency standards that:	
i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used.	no
ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced.	no

c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply. no

4. Does your agency include water softener checks in home water audit programs? no

5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models? no

C. Water Waste Prohibition Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

Rather than having a Water Waste Prohibition ordinance in effect in the LBWD service area, we have developed very extensive educational and outreach programs. LBWD's primary objective is to reach our customers on a very positive tone and work at changing behavior and developing greater awareness of water issues facing the City of Long Beach and in particular water conservation. A program begun in 2002, and developed by MWD is a set of residential gardening classes know as "Protector del Agua" a series of classes that deal with a number of issues from planning, plant selection, irrigation to maintenance have been offered to our residential customers. The City of Long Beach Board of Water Commissioners Resolution No. WD-1071 -Emergency Water Conservation Plan adopted in 1991 includes water waste prohibition measures. However, the resolution is reserved for water shortage emergencies resulting from extremely low water supply and storage as indicated by the State Water Resources Control Board and the Metropolitan Water District of Southern California.

E. Comments

Reported as of 8/30/05

BMP 14: Residential ULFT Replacement Programs

Reporting Unit:

BMP Form Status:

Year:

Long Beach Water Department**100% Complete****2004****A. Implementation**

	Single-Family Accounts	Multi-Family Units
1. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	yes	yes
Number of Toilets Replaced by Agency Program During Report Year		
Replacement Method	SF Accounts	MF Units
2. Rebate	220	380
3. Direct Install	0	0
4. CBO Distribution	1466	1658
5. Other	0	0
Total	1686	2038

6. Describe your agency's ULFT program for single-family residences.

The LBWD Single-family Residential ULFT Program encourages the replacement of water-guzzling toilets with no greater than 1.6 gallon ultra low-flush toilets. Single-family customers purchase their toilets from a vendor and apply for the rebates.

7. Describe your agency's ULFT program for multi-family residences.

The LBWD Multi-family Residential ULFT Program encourages the replacement of water-guzzling toilets with no greater than 1.6 gallon ultra low-flush toilets. Single-family customers purchase their toilets from a vendor and apply for the rebates.

8. Is a toilet retrofit on resale ordinance in effect for your service area? no

9. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:

City of Long Beach

Resale ordinance not in effect

B. Residential ULFT Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	600000	700366
2. Actual Expenditures	603489	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

MWD of Southern California is a cosponsor of the LBWD ULFT Program and provides funding to cover half the cost of each toilet exchanged or rebated.